

## MISSING FUEL CAP DETECTION SYSTEM

### ABSTRACT OF THE DISCLOSURE

A method for detecting a missing or improperly installed fuel cap on a vehicle includes a first leak test that detects a leak in an evaporative emissions system of a vehicle. A refueling test detects a  
5 refueling of the vehicle when the first leak test detects the leak. A fuel cap indicator in the vehicle is activated when the first leak test detects the leak and the refueling test detects the refueling. The fuel cap indicator is deactivated after a predetermined time period. The fuel cap indicator remains deactivated when a predetermined number of leak  
10 tests consecutively detect the leak. The fuel cap indicator is deactivated when an occupant of the vehicle indicates that a fuel cap of the vehicle is properly installed. The occupant activates an actuator on an instrument panel of the vehicle to indicate the fuel cap is properly installed.